

Do Rural Incentives Payments Affect Entries and Exits of General Practitioners?

by

Jongsay Yong

Melbourne Institute of Applied Economic & Social Research
University of Melbourne

Co-authors:

Hugh Gravelle (University of York)

Matthew McGrail (Monash University)

Anthony Scott (University of Melbourne)

Peter Sivey (RMIT)

Background

- Most countries have problems getting doctors to work in rural areas.
- Financial incentives are common policy lever.
- Objective: To assess the effect of GP rural incentive program on recruitment and retention.
- Little consensus from literature, quality of evidence is generally poor.
- Using MABEL data, Swami (2017) examines rural incentives on GP hours work and waiting times.

Do financial incentives work? Who do they affect?

- 1 Do financial incentives change the rural-urban distribution of doctors?
- 2 Do doctors from non-eligible areas relocate to eligible areas?
- 3 Do doctors in eligible areas more likely to stay, i.e., fewer exits?
- 4 Do new GPs more likely to choose eligible areas?

- Rural incentives for GPs have been in existence in Australia since mid-1990s.
- **July 2010:** General Practice Rural Incentives Program (GPRIP) streamlined previous programs into 2 components:
 - ① **GP Component**
 - incentives for GPs to stay in remote areas,
 - e.g., a GP working in RA5 for 5 years can get incentive payment up to \$47,000 a year depending on volume of services.
 - ② **Rural Relocation Incentive Grant (RRIG)**
 - relocation grants to GPs who move to remote location,
 - e.g., a GP moving from RA1 to RA5 can get a one-off A\$120,000.

Eligibility

- GPRIP eligibility was determined by a new geographic remoteness classification system based on the [Australian Standard Geographical Classification—Remoteness Area \(ASGC-RA\)](#) system.
- The change in remoteness classification resulted in some [755 locations](#) (out of [~3,800 locations](#)) not eligible under previous programs became eligible for incentive payments under GPRIP post July 2010.

Methods

Difference-in-differences estimation

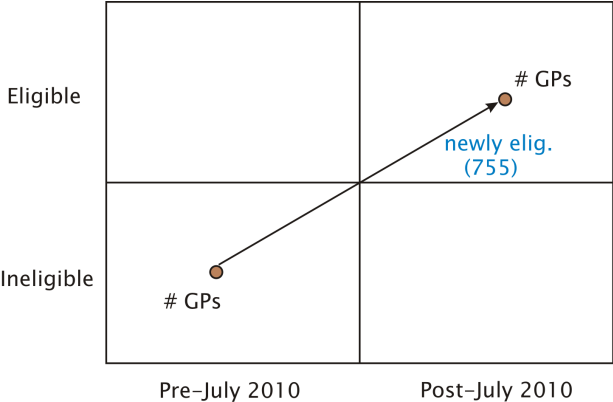
Unit of analysis: location (smaller than postcode)

Eligible		
Ineligible		
	Pre-July 2010	Post-July 2010

Methods

Difference-in-differences estimation

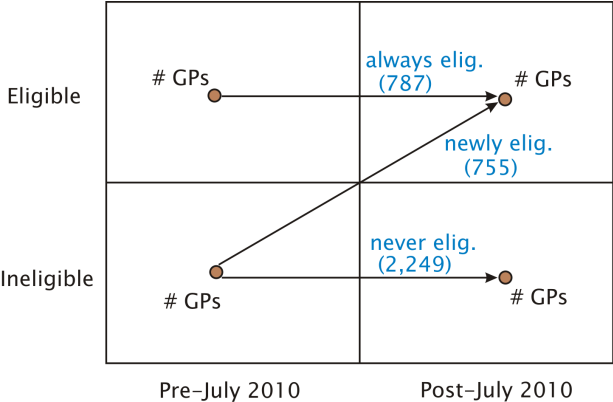
Unit of analysis: location (smaller than postcode)



Methods

Difference-in-differences estimation

Unit of analysis: location (smaller than postcode)



- Australian Medical Publishing Company (AMPCo): Database of all doctors in Australia, 2008/09–2013/14.
- List of **all** doctors deemed in active practice in May each year.
- Each doctors is identified by an encrypted ID allowing tracking over time.

Quantities of interest

- Total count (stock) of GPs in a location.
- Entries into and exits from a location.
 - ① Relocation entries: Existing GPs move to new practice location.
 - ② Relocation exits: Existing GPs leave practice location.
 - ③ New entries: Newly qualified GPs enter a location.
 - ④ Other exits: All exits other than relocation exits.

GP stock, entry and exit counts

Year	Stock	Relocation entries/exits*	New entries#	Other exits
2008/09	21,011	2,013	482	927
2009/10	21,456	1,901	362	690
2010/11	21,997	1,502	879	849
2011/12	22,571	1,940	334	819
2012/13	23,758	1,477	462	487
2013/14	24,084	2,270	426	1,050

* Existing GPs moving from one location (exit) to relocate to another location (entry).

Entries of newly qualified GPs.

Difference-in-differences estimates, fixed effects regression

Variable	Stock	Relocation entries	Relocation exits	New entries
Ref: Never eligible				
Newly elig \times post-2010	0.025 (0.017)	0.059 (0.042)	0.059 (0.049)	0.085** (0.023)
Always elig \times post-2010	-0.019 (0.014)	0.077** (0.029)	0.086** (0.032)	0.014 (0.016)
N	16,781	16,904	16,904	16,904

Note: figures in parentheses are robust standard errors.

Significance levels: †: 10% * : 5% **: 1%

Summary

- Incentives payments have no effect on the total number of GPs in eligible locations.
- Sig. positive effects on new entries, robust to several estimation methods.
- Positive effects on relocation entries and exits, results not robust.